

M003 MICROCOMPUTER SYSTEM MODIFICATION NOTE 5 (for Electronics Technicians)

Maintenance Branch

W/OPS12: FJZ

SUBJECT : 5.25 Inch Floppy Drive Installation

PURPOSE : To provide 5.25 inch floppy drive installation instructions.

EQUIPMENT : All M003 Microcomputer Systems
AFFECTED

PARTS REQUIRED : 5.25 inch floppy drive and IDE ribbon cable

SPECIAL TOOLS : None
REQUIRED

MODIFICATION : 5.25 inch floppy drive and associated hardware can be locally
PROCUREMENT : procured or can be sent to the site by calling Bill Blackmore at 301-713-2093 x107.

SITES AFFECTED : All ART-1 and ART-2 sites

ESTIMATED TIME : 1 Hour
REQUIRED

EFFECT ON OTHER : None
INSTRUCTIONS

AUTHORIZATION : N/A

VERIFICATION : This procedure was tested at the Central Region Headquarters (CRH)
STATEMENT : and at the WFO Chanhassen, MN.

TECHNICAL : For questions or problems pertaining to this modification procedure,
ASSISTANCE : please contact Franz J. G. Zichy at 301-713-1833 x128.

BACKGROUND

During the Summer of 2000, Central Region Headquarters (CRH) and WFO Chanhassen, MN, developed a procedure for sending Upper Air archive data to the National Climatic Data Center (NCDC) via e-mail. The Observing System Branch (OSB) under the Field Systems Operations Center was informed of this activity. Since the Microcomputer-based Automated Radio Theodolite (MicroART) computer is still using legacy 5.25 inch low density floppy diskettes, OSB approved and encouraged the development of this procedure. By December 2000, several stations in the Central Region were e-mailing their Upper Air data archive to NCDC without problems. OSB determined the procedure was working reliably and has directed the implementation of the CRH procedure across the entire Upper Air network.

PROCEDURE:

1 5.25 inch Floppy Drive Installation Procedure

Because field sites have various computer configurations, this procedure provides a general installation procedure to install a 5.25 inch half-height floppy disk drive into a tower type computer. Ensure the computer is capable of e-mailing the store/archive upper air data files.

NOTE: Sites may have different computer configurations. These instructions are provided as a general guideline.

1. Locate the computer with e-mail capability and ensure it has sufficient space for a 5.25 inch floppy drive.
2. If not already powered-up, power-up the computer and access the BIOS. To access the BIOS, refer to the computer's users guide.
3. Ensure the BIOS supports a 5.25 inch floppy disk drive. If it does, power-down the computer and prepare to install the floppy disk drive by disconnecting the cables from the rear of the computer case. Move the case to an appropriate work surface.
4. Remove the mounting screws from the back of the case using the appropriate screwdriver.
5. Slide or lift the computer cover from the chassis (figure 1).

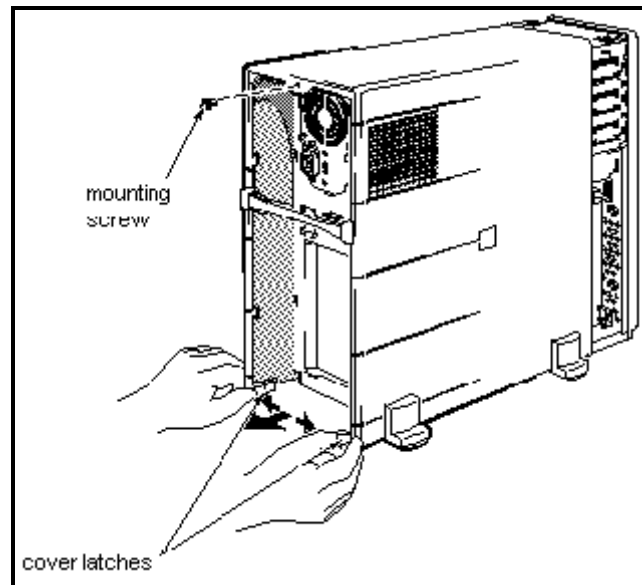


Figure 1

6. Remove the bezel from the front of the case by depressing the tabs and tilting the bezel down and away from the case (figure 2).
7. Locate the slot where the 5.25 inch floppy is to be installed and remove the front panel insert(s) (figure 3).
8. Slide the 5.25 inch floppy drive into the selected slot and attach with 4 drive-mounting screws (figure 4).
9. From inside the chassis, connect an unused power connector to the drive (figure 5).
10. If the existing 3.5 inch floppy drive IDE ribbon cable has a 5.25 inch floppy connector, attach the connector to the newly installed drive. If not, connect an IDE cable from the 5.25 inch floppy drive to the IDE interface card (figure 5).
11. Ensure all connectors are securely connected.
12. Return the computer case from where it was removed in step 3.
13. Reconnect all the cables to the back of the case.

NOTE: Do not replace the cover until the newly installed 5.25 inch drive has been tested.

14. Power-up the computer and access the BIOS as performed in step 2.
15. Ensure the 5.25 inch drive exists as either the "A:\\" or "B:\\" drive. If it does not, configure the BIOS to include the newly installed drive (refer to the computer's users manual for the BIOS setup procedure).

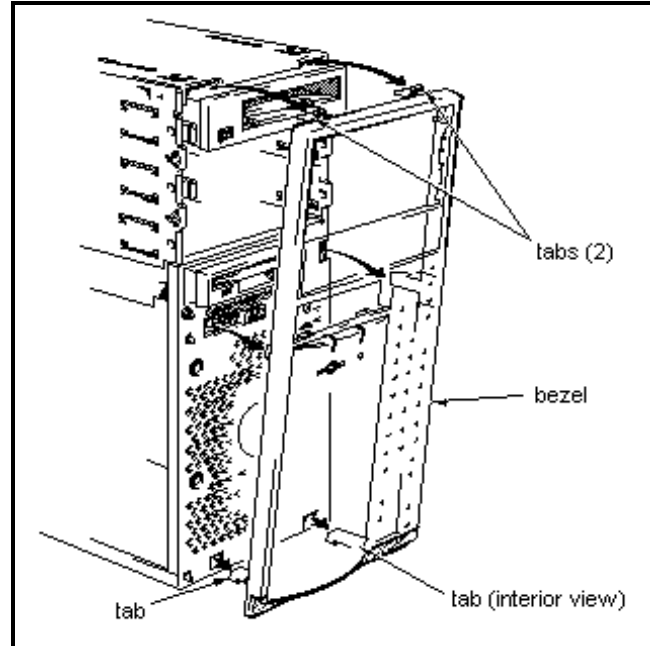


Figure 2

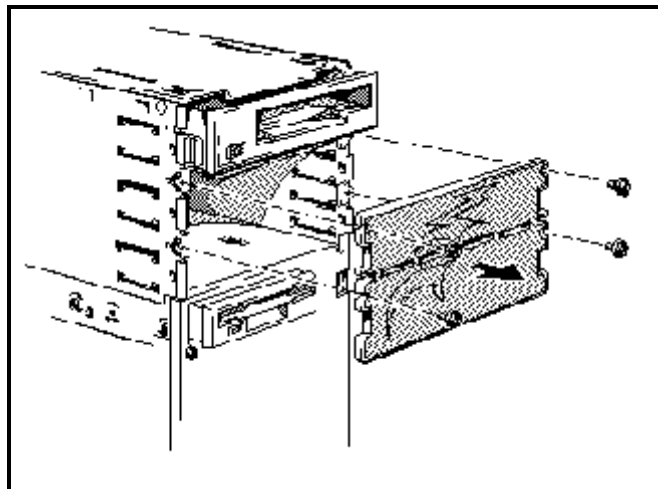


Figure 3

16. After the BIOS has been configured, reboot the computer.
17. Insert a store/archive upper air data files disk and list its directory to verify the drive works.
18. If the drive fails to function, review the installation procedure and cable connections.
19. Replace the computer cover in the reverse order as it was removed in step 4.

This completes the 5.25 inch floppy drive installation procedure.

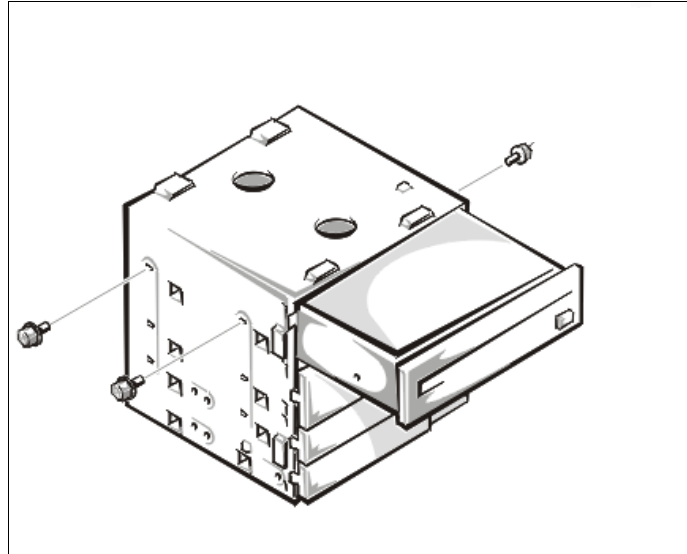


Figure 4

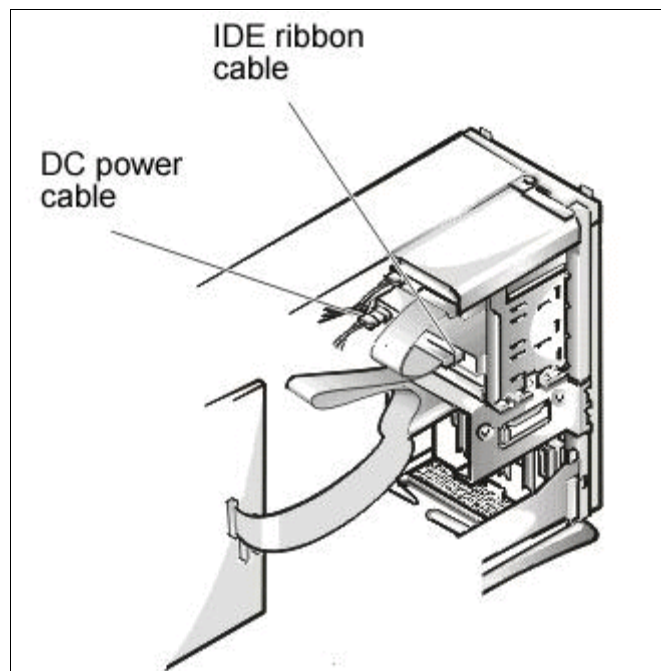


Figure 5

REPORTING MODIFICATION

Report the completed modification on a WS Form A-26, Maintenance Record according to instructions in Engineering Handbook 4 (EHB-4), Engineering Management Reporting System (EMRS), Part 2, and Appendix J. Include the following information on the WS Form A-26.

Block #	Block Type	Information
5	Description	Install 5.25 inch floppy drive on PC used to email Upper Air archive data files to NCDC
7	Equipment Code	M003
8	Serial Number	012
15	Comments	Installed 5.25 inch floppy drive on the PC used to email Upper Air archive data files to NCDC
17a	Mod. No.	5

A completed sample WS Form A-26 is provided as attachment A.

John McNulty
Chief, Maintenance, Logistics, and Acquisition Division

Attachment A - WS Form A-26 Sample

Attachment A

WS FORM A-26 (4/94)		WS FORM A-26 (4/94)				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE				Document Number G 49978			
ENGINEERING MANAGEMENT REPORTING SYSTEM MAINTENANCE RECORD													
General Information		1. Open Date 5 / 14 / 01		Time 0900		2. Initials JMM		3. Response Priority (check one) <input type="radio"/> Immediate <input type="radio"/> Low <input type="radio"/> Routine <input checked="" type="radio"/> Not Applicable		4. Close Date 5 / 14 / 01		Time 1000	
5. Description Install 5.25 inch floppy drive on PC used to email Upper Air archive data files to NCDC.													
Equipment Information		6. Station ID FFC		7. Equipment Code M003		8. Serial Number 012		9. TM M		10. AT M		11. How Mal. 999	
12. EQUIPMENT OPERATIONAL STATUS TIMES		a. Fully Operational 1:00		b. Logistics Delay <input type="text"/>		Partly Operational <input type="text"/>		c. All Other <input type="text"/>		d. Logistics Delay <input type="text"/>		Not Operational <input type="text"/>	
13. Parts Failure Information										14. Work Load Information			
Block #	a. ASN	b. NSN	c. TM	d. AT	e. How Mal.	f. Qty.	g. Maint. Hrs.	Type	Staff Hrs.				
1								a. Routine					
2								b. Non-routine					
3								c. Travel					
4								d. Misc.	1:00				
5								e. Overtime					
Miscellaneous Information		15. Maintenance Comments Installed 5.25 inch floppy drive on PC used to email Upper Air archive data files to NCDC										16. Initials JMM	
17. SPECIAL PURPOSE REPORTING		a. Mod. No. 5		b. Mod./Act./Deact. Date 5/14/01		c.		d.		e.			
18. CONFIGURATION MGMT. REPORTING (use as directed)		ASN		Vendor Part Number (New Part)		Serial Number (Old Part)		Serial Number (New Part)					